

### ABSTRACT

5 A bit retention apparatus for the use of retrieving the hammer bit in cases of shankage. The apparatus incorporates a dual sleeve design that fits over the chuck and the extended head section of the hammer bit. The first, "inner" sleeve has two or more ring pieces that fit onto the chuck and have the retention ring fitted into the lower section of the sleeve. The second, "outer" sleeve fits onto the chuck over the inner sleeve to provide protect to the inner sleeve while pulling the shanked bit out of the well bore. Attachment to the bit is accomplished by collars, knobs, or threads on the interior of the sleeves that correspond with holding bands, retention rings, or threads on the bit and chuck.